Preliminary Amendme Applicant: Steven Neville Chatfield Serial Number: To Be Assigned Attor Docket: KCO1002US

Page 16, line 9, after the sequence ending "GTC", insert -- (SEQ ID NO: 5)--.

Rage 16, line 10, after the sequence ending "GAT", insert --(SEQ ID NO: 6)--.

Rage 16, line 11, after the sequence ending "TTC", insert --(SEQ ID NO: 7)--.

Page 16, line 12, after the sequence ending "TTC", insert -- (SEQ ID NO: 8)--.

Page 16, line 13, after the sequence ending "TCC", insert -- (SEQ ID NO: 9)--.

Page 16, line 14, after the sequence ending "TCA", insert -- (SEQ ID NO: 10)--

IN THE CLAIMS:

Please amend the claims as follows:

- 1. (Amended) A polypeptide comprising
- (i) tetanus toxin fragment C or a fragment thereof of at least 6 amino acids, fused to
- (ii) the pre-S1 region of hepatitis B virus (HBV) or a fragment thereof of at least 6 amino acids, [and/or] the pre-S2 region of HBV or a fragment thereof of at least 6 amino acids, or both the pre-S1 region of HBV or a fragment thereof of at least 6 amino acids and the pre-S2 region of HBV or a fragment thereof of at least 6 amino acids,

wherein the polypeptide induces antibody that recognizes the pre-S1, [and/or] pre-S2, or both the pre-S1 and pre-S2 regions [region] of HBV.

4. (Amended) A polypeptide according to claim 1, 2 or 3 which comprises a fragment of the pre-S1 region of at least 20 amino acids [and/or] a fragment of the pre-S2 region of at least 20 amino acids, or both a fragment of the

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pre-S1 region of at least 20 amino acids and a fragment of the pre-S2 region of at least 20 amino acids.

- 5. (Amended) A polynucleotide encoding a polypeptide according to [any one of the preceding claims] claim 1, 2 or 3.
- 8. (Amended) A host cell comprising a vector according to claim 6 [or 7].
 - 10. (Amended) A vaccine composition comprising a polypeptide according to any one of claims 1 to [4, a polynucleotide according to claim 5 or a vector according to claim 6 or 7,] 3, together with a pharmaceutically acceptable carrier [to] or diluent.
 - 11. (Amended) A method of treating [or preventing] HBV infection in [a human or] <u>an</u> animal which comprises administering to the [human or] animal an effective amount of a polypeptide according to any one of claims 1 to 3, [4, a polynucleotide according to claim 5 or a vector according to claim 6 or 7].
 - 12. (Amended) A method for producing antibodies which recognize epitopes within the pre-S1, [and/or] pre-S2, or both the pre-S1 and pre-S2 regions of HBV which method comprises administering a polypeptide according to any one of [claim] claims 1 to 3 [4, a polynucleotide according to claim 5 or a vector according to claim 6 or 7] to a mammal.



14. (Amended) A method of treating HBV infection in [a human or] an animal, which comprises administering to the [human or] animal an effective amount of an antibody according to claim 13.

Please add the following new claims 15 to 34.

- 15. A polynucleotide encoding a polypeptide according to claim 4.
- 16. A vector comprising a polynucleotide according to claim 15 operably linked to a regulatory sequence.
 - 17. A host cell comprising a vector according to claim 16.
- 18. A vaccine composition comprising a polypeptide according to claim 4, together with a pharmaceutically acceptable carrier or diluent.
- 19. A vaccine composition comprising a polynucleotide according to claim 5, together with a pharmaceutically acceptable carrier or diluent.
- 20. A vaccine composition comprising a polynucleotide according to claim 15, together with a pharmaceutically acceptable carrier or diluent.
- 21. A vaccine composition comprising a vector according to claim 6, together with a pharmaceutically acceptable carrier or diluent.

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- 22. A vaccine composition comprising a vector according to claim 16, together with a pharmaceutically acceptable carrier or diluent.
- 23. A method of preventing HBV infection in an animal which comprises administering to the animal an effective amount of a polypeptide according to any one of claims 1 to 3.
 - 24. A method according to claim 23 wherein the animal is a human.
 - A method according to claim 11 wherein the animal is a human. 25.
- A method of treating HBV infection in an animal which comprises 26. administering to the animal an effective amount of a polypeptide according to claim 4.
 - A method according to claim 26 wherein the animal is a human. 27.
- A method of preventing HBV infection in an animal which 28. comprises administering to the animal an effective amount of a polypeptide according to claim 4.
 - A method according to claim 28 wherein the animal is a human. 29.
- A method of treating HBV infection in an animal which comprises 30. administering an effective amount of a polynucleotide according to claim 5.